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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,600	04/07/2004	Chao-Nan Kuo	JCLA10593	8134
7590	12/12/2006		EXAMINER ANGEBRANNDT, MARTIN J	
J.C. Patents, Inc. Suite 250 4 Venture Irvine, CA 92618			ART UNIT 1756	PAPER NUMBER

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/820,600

**Applicant(s)**

KUO ET AL.

**Examiner**

Martin J. Angebrannt

**Art Unit**

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7/15/04, 11/18/05 & 4/7/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/18/05</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims should recite a reflection layer, not an antireflection layer as the metals recited in claim 19 reflect the light. This is likely a translation error.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Yoshizawa et al. JP 06-199045.

Yoshizawa et al. JP 06-199045 in table 1 [0077] teaches the use of dye D-5 [0060] in sample 5 coated on a polycarbonate substrate. Optical recording media having the structure of figure 2, where the substrate is coated with a recording film, a reflection film and a protective overcoat. [0071].

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With respect to claims 3-7, the claims do not require these moieties to be used.

6. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Shiba et al. '637.

Shiba et al. '637 teach the use of dye I-5 to sensitize a photographic emulsion in sample 7 of table 1.

The claims do not preclude the optical recording medium being photographic film.

7. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. JP 06-199045 and Namba et al. '314.

Namba et al. '314 teaches compounds with a terminal moieties I,II, II or XIII, and XIV (col 6-10). The phenyl rings may be substituted by alkyl, aryl, heterocyclic, halogen, alkoxy, aryloxy, alkylthio, arylthio, alkylcarbonyl, arylcarbonyl, alkylcarbonyloxy, arylcarbonyloxy, alkylamide, arylamide, alkylcarbomoyl, arylcarbomoyl, alkylamino, alkylamide, sulfonyl, sulfonamide, nitro, cyano and the like (11/28-42). The linkage between the moieties can be a trimethine linkage LVIII (col 12). The anions may be those listed (12/55-65). The substrate can be PMMA, acrylic resins, epoxy resins, polycarbonate polyether sulphone, methyl pentene polymer. (37/7-23).

With respect to the embodiments not anticipated above, it would have been obvious to one skilled in the art to modify the cited example of Yoshizawa et al. JP 06-199045 by using a benzoindolene moiety, in place of the indolene moiety and/or using a 2-quinolinyl moieties in place of the 4 quinolinyl moiety based upon the disclosure of equivalence by Namba et al. '314. Further it would have been obvious to use any of the substituents disclosed by Namba et al. '314 for use on the phenyl rings in place of the hydrogens or other counterions disclosed with a

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reasonable expectation of forming a useful optical recording medium and to add a reflective and protective layer as discussed with respect to figure 2 of Yoshizawa et al. JP 06-199045.

Alternatively it would have been obvious to modify the teachings of Namba et al. '314 by using unsymmetrical trimethine dyes using a benzoindolene or indolene moiety and a 2-quinolinyl or 4 quinolinyl moiety based upon the prior use of these in the art as evidenced by Yoshizawa et al. JP 06-199045 and the disclosure of unsymmetrical dyes by Namba et al. '314. Further it would have been obvious to use any of the substituents disclosed by Namba et al. '314 for use on the phenyl rings in place of the hydrogens or other counterions disclosed with a reasonable expectation of forming a useful optical recording medium and to add a reflective and protective layer as discussed with respect to figure 2 of Yoshizawa et al. JP 06-199045.

8. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. JP 06-199045 and Namba et al. '314, further in view of Tajima et al. '045.

Tajima et al. '045 teaches indolenic trimethine cyanine dyes with various counter ions used in optical recording media.

In addition to the basis above, it would have been obvious to one skilled in the art to modify the embodiments rendered obvious above by using other counter ions, such as those disclosed by Tajima et al. '045 in place of those disclosed by Yoshizawa et al. JP 06-199045 and Namba et al. '314 with a reasonable expectation of forming a useful optical recording medium.

9. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiba et al. '637, further in view of Horikoshi et al. '397.

Horikoshi et al. '397 teaches the terminal moieties including quinoline or indole moieties with alkyl, halogen, phenyl, hydroxyl, alkoxy, carbony, alkoxycarbonyl, alkylsulfamoyl, acetyl, nitro or the like (4/1-40). These are used in photographic emulsions.

It would have been obvious to modify the compounds of Shiba et al. '637 by adding substituents to the phenyl moieties, such as those disclosed by Horikoshi et al. '397 with a reasonable expectation of forming a useful photographic medium.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

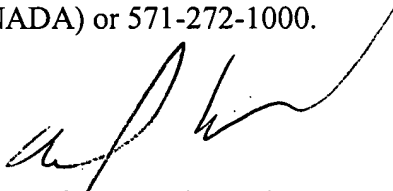
Brooker et al., "Color and Constitution VIII, absorption of unsymmetrical dyes", J. Am Chem. Soc., Vol. 67 pp. 1889-1893 (11/1945), GB 354898, GB 344409, Reister et al. '137 and Ohlshlager et al. '926 teach similar dyes.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J. Angebrannt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Martin J Angebrannndt  
Primary Examiner  
Art Unit 1756

12/11/06